

CLAIM SUMMARY DOCUMENT

WE CLAIMS:

1. (Currently Amended) A driving ~~Driving~~ system (1) for a separator having a centrifugal drum with a vertical axis of rotation, comprising:
 - a) ~~which has~~ a vertically aligned driving spindle (2) for configured to accommodate a centrifugal drum; ~~drum, which is not shown here and which is placed onto the driving spindle~~ (2);
 - b) the driving spindle (2) being disposed arranged by means of an upper a neck bearing (3) and a lower footstep bearing (4) particularly in an opening (14) of a drive housing (5);
 - e) ~~and the neck bearing being supported in an axially rigid and radially resilient manner on the machine housing; and (5);~~
characterized in that
 - d) the neck bearing (3) is being constructed as an angular ball bearing and supporting bearing;
 - e) ~~the neck bearing (3) supports the centrifugal drum in the downward direction on a spherical surface-shaped supporting surface of the machine housing (2).~~
2. (Currently Amended) ~~Driving~~ The driving system according to Claim 1, ~~characterized in that wherein~~ the neck bearing (3) is supported on the an inside in the an upward direction on the driving spindle (2) and in the a downward direction toward the an outside on an outer neck bearing ring (8).
3. (Currently Amended) The ~~Driving~~ driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that the wherein the neck bearing includes a neck bearing ring (8) has having a ball socket ball and socket-type construction on its underside (12) and rests resting on a the complementarily spherical section type shaped bearing collar (13) of the drive housing (5) and in this manner the spherical surface-shaped supporting surface.~~
4. (Currently Amended) The driving ~~Driving~~ system according to Claim 1 ~~to one of the preceding claims,~~

~~characterized in that the~~ wherein a center point of the spherical-surface-shaped supporting surface is situated in ~~the~~ an area of the footstep bearing (4), ~~particularly in its center.~~

5. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the spherical-surface-shaped supporting surface is utilized for the a weight-dependent frictional damping of the driving system.

6. (Currently Amended) ~~The driving~~ Driving system according to Claim 3 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the spherical-surface-shaped supporting surface is utilized for the a weight-dependent frictional damping of the driving system.

7. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ a gap (9) is ~~constructed~~ disposed between the an outer circumference of the neck bearing ring (8) and ~~the~~ an inner circumference of the drive housing (5).

8. (Currently Amended) ~~The driving~~ Driving system according to Claim 7 ~~one of the preceding claims,~~
~~characterized in that wherein~~ a sealing and spring ring (10) bridges the gap (9).

9. (Currently Amended) ~~The driving~~ Driving system according to Claim 8 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the sealing and spring ring (10) ~~is constructed as~~ includes an O-ring which is ~~preferably~~ arranged in a groove (11) on the an outer circumference of the neck bearing ring (8), from which ~~is it~~ projects radially to the an outside of the neck bearing ring.

10. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the footstep bearing (4) is radially fixed in the drive housing (5) and is axially ~~constructed~~ disposed as a movable bearing.

11. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that the~~ wherein a supporting surface of the neck bearing ring on the drive housing (5) is ~~in an operative connection~~ connected with a lubricating system for lubricating the neck bearing and the footstep bearing (3, 4).

12. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that~~ wherein the neck bearing (3) and the footstep bearing (4) are ~~mutually~~ connected by a duct (16), ~~particularly a ring duct~~ around the driving spindle, so that the two bearings (3, 4) can be jointly lubricated.

13. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that~~ wherein a first lubricating bore for a lubricant, ~~such as oil or grease,~~ leads into the an area around the driving spindle (2) ~~above the neck bearing~~ (3).

14. (Currently Amended) ~~The driving~~ Driving system according to Claim 13 ~~one of the preceding claims,~~
~~characterized in that~~ wherein a second lubricating bore (17) is provided for guiding lubricant to the footstep bearing (4).

15. (New) The driving system of Claim 4, wherein the center point is situated in a center of the footstep bearing.

16. (New) The driving system of Claim 13, wherein the lubricant is one of oil and grease.